2:Gough E-4, 5 (1947-1949)1961 A W11 Kerala A W11
Central Kerala Nayar

563 [162] The Christians of Kerala numbered about 20 per cent of the population in 1931. The Syrian Christians, the most ancient and numerous group, may be descended from Persian Nestorians; they were trading on the coast at least by 525 A.D. (McCrindle, 1897: 119). Christians [651] were and are concentrated in Travancore and Cochin. They received land grants near the ports and enjoyed virtual self-government provided they paid taxes to the kings (Logan, 1951, I: 260–270; III: cxxi–cxxvi). As landlords, tenants, and administrators—as well as traders—they ranked socially parallel to the Nayars and were served in the same manner by Hindu polluting castes and serfs. Their trade declined after the Arabs became dominant on the coast, and some of them began to serve in the royal armies along with Nayars. The Portuguese converted some Syrians to Roman Catholicism, but the converts still retained the Syriac rite. All Syrians were readily distinguishable from the lower-ranking Latin Catholics, converts to Catholicism from Portuguese times who were drawn from various polluting castes.

The Economic System

438 The principles of reciprocity and redistribution,[4] rather than of market trade, dominated the village economy until toward the mid-nineteenth [564] century. In villages, castes were characterized by hereditary occupations and correspondingly by hereditary, differential rights in the [463] produce of village lands (Logan, 1951, I: 110–112, 269, 270, 599–600, 623). The village landlord and the Nayar tenants were the main redistributive agents, collecting in goods from the lower orders and [592] redistributing them in customary shares. In all village economic transactions, *households*, and not whole caste groups or individuals, were the units of interaction.

471 The village landlord's household "owned" almost all the land in the village. "Ownership" meant both more and less than modern Western 592 landownership (Logan, 1951, I: 602–603). The landlord might not sell 566 his land without the consent of the king or of a chief, and sale was restricted to families of appropriate caste. He might not evict his tenants, village servants, or serfs without their consent unless they committed grave crime (*ibid.*, I: 607). On the other hand, the landlord's ownership included judicial rights over the village population.

The landlord retained a portion of the land as his private domain for cultivation by his serfs. The rest was held by Nayar retainer households as non-cultivating tenants (*kānakkar*). The tenant's household

[4] For an analysis of the general operation of these principles in the Indian village economy, see Neale, 1957: 218–236.

8:Panikkar I-4, 5 (no date) 1918 AWII Kerala AWII Nayar

valent among them also. The more one looks into these matters the more one becomes clear that in the unorganised and uneducated human mind, be it "civilised" or be it primitive, there is a horizontal stratification of the most contradictory ideas, which lie absolutely undisturbed in the ordinary course of life. In the mind of the ordinary man whose *forte* is not clear thinking, a great deal of intermingling of such ideas might take place. It is no uncommon sight to see a thoroughly Hindu-ised Nāyar who talks about Absolutism and Illusion, and believes in them, paying a *Kāniyān* to get the devil out of his little niece. This is, perhaps, the truth which lies midway between those who assert, like Dr. Frazer, that magic and religion are hostile and cannot be reconciled, and those who, like Dr. Marett, hold that in their origin they are the same, that it is in their character as looked upon by society they differ. The view I have maintained here is that religion and magic are different in their psychological and emotional effects and that Dr. Frazer is right when he says that they are at bottom hostile. But the almost universal coexistence of magic and religion is due to the attitude of society which tolerates all contradictions and insists only on their effect being for social welfare.

VII.—THE MATERIAL CULTURE OF THE NĀYARS.

Occupation.—The Nāyars are at present an essentially agricultural population. The vast majority of them are peasant proprietors owning small farms. Rice and coco-nuts are the chief things cultivated, though in North Malabar pepper and cardoman have also their share.

With regard to these matters the Nāyars have attained a certain stage of excellence. Their coco-nut estates are planted with a considerable amount of scientific skill and they are proficient in the industries which are allied to coco-nut cultivation; such as coir-matting, copra making and extraction of coco-nut oil. The extreme fertility of the land has made agricutural chemistry, as far as coco-nut and rice cultivation are concerned, a matter of secondary importance; and even to-day there are very few Nāyars who have studied the Western methods of agriculture.

As each Nāyar family generally lives in a compound of its own, coco-nut cultivation is generally in small farms. Extensive coco-nut plantations owned by the same man are very few. The position is much like that in England before the Enclosures. Even if all the land in a particular area is owned by the same person it is seldom enclosed and transformed into one large estate. On the other hand, they continue to be regarded as separate compounds and the houses on them are generally occupied either by Nāyar tenants or by Pulaya slaves.

The fact that Nāyar families live in garden houses is one of great significance. Horticulture is practised with great interest in all families, rich as well as poor. It is, in fact, very seldom that any Nāyar family uses vegetables bought from the market.

for the most acute problem of Kerala, viz., abnormally high rate of unemployment. According to a survey carried out by the State Statistics Department open unemployment in the State was as high as 4.2 per cent (all-India 0.6%) and urder-employment 9.6 per cent of the total population (all-India 6.0%).

The unemployment problem of Kerala might not have been so severe had there been a correspondingly rapid development of industries over the past few decades. In this sphere the State suffers from certain handicaps. Although the industrial sector in Kerala absorbs a high proportion of the working force (Kerala 19.1%; India 9.4%), the majority of them are engaged in very low productivity industries. The two major industries of Kerala, viz., coir and cashewnut are technologically very backward. Coir industry, which is organized as a cottage industry, absorbs 4-5 lakh persons. Cashewnut-processing, although organized on the lines of factory industry, is almost entirely unmechanized. As a result, labour productivity in the secondary sector is extremely low. Because of this, industrial sector in Kerala does not create any sizeable reinvestible surplus and the process of capital formation is hampered. The types of industries in which Kerala predominates, have not also aded the development of entrepreneurial talents. Kerala lacks in a long tradition of industrial enterprise. Most of the large scale industries which now exist in Kerala, for example, Fertilizers & Chemicals Travancore Ltd., Travancore-Cochin Chemicals Ltd., Indian Aluminium Company and Aluminium Industries Ltd., were started under the direct initiative of the governments of the erstwhile States of Travancore and Cochin or industrialists from other neighbouring States of India. No distinct body of local entrepreneurship has, therefore, developed in the State.

In addition, lack of sizable mineral deposits (except Ilmenite) adds to the difficulties which have been retarding industrial development of the State. Coal as well as all metallic raw materials for the industries of Kerala have to be transported over long distances from other parts of the country. But there are favourable factors compensating some of these deficiencies in the economic endowments of the State. The agricultural sector of Kerala abounds in a rich variety of high value yielding cash crops like coconut, pepper, rubber, arecanut, tea, cashewnut, cardamom and coffee. These crops not only provide considerable incomes for the farmers, but are a good source of foreign exchange earnings and provide valuable raw materials for the industries. A vast potential for generation of low-cost hydro-electric power makes up for the absence of fossil fuels. Rich forest and fishery resources, a highly intelligent and literate labour force, easy accessibility to most parts of the State through a wide network of roadways, and the scenic beauty of its landscape capable of attracting tourists, are some of the other assets of Kerala.

As a result of the present survey, several lines of technically and economically feasible developments have been suggested in this report in the industrial and other fields. The total impact of these developments would be to raise the per capita income of the State from the present level of Rs. 240 (at 1955-56 prices) to Rs. 404 (at the same price level) by 1970-71. State income would rise from Rs. 400 crores (at 1955-56 prices) to Rs. 812.8 crores, i.e., at an average annual rate of 10.3 per cent. The targets are undoubtedly on the high side, but the needs of Kerala in the context of its huge unemployment and very low per capita income demand a rather high

11: India G-4, 5 (1960-1961) 1962 AWII Kerala AWII

50 per cent higher than at the all-India level. Agricultural crops and the plantations, which form the main component of the primary sector, are largely produced for the market and are the basic factors responsible for imparting a high level of productivity to this sector.

1.26 Agriculture in the State is characterized by a high value yielding cropping pattern, good physical yields, a high intensity of cropping and superior cultivation techniques. During 1956-57 the intensity of cropping[1] was 119 per cent (all-India—113%). However, if field crops alone are taken into account, the cropping intensity shoots up to 150 per cent. It is the latter percentage which is the more relevant one, since the area covered by the perennial crops is irrelevant from the point of view of double or triple cropping. All these factors combine to make the agricultural sector of Kerala highly productive, the average level of agricultural output per net cultivated acre in Kerala being about Rs. 360 against Rs. 125 for the whole of India.

1.27 Kerala owes the superiority of its cropping pattern to the large number of high value yielding plantation crops grown in the State. Coconuts, the most important among these, occupy about 20 per cent of the gross cropped area and yield Rs. 450 per acre on an average. Other cash crops in the order of their importance in terms of area covered are pepper, rubber, arecanut, tea, cashewnut, cardamom, and coffee. Taken as a whole, they cover approximately 40 per cent of the gross cropped area.

1.28 Apart from the high productivity aspect of the plantation crops, they are of significance to the economy from two other angles. First, these crops provide the raw material for some of the key industries of the State. Coir making, the most important industry of the State, utilizes the outer husks of the coconuts. Similarly, cashewnut industry, the second most important industry of Kerala, also draws its raw material from the agricultural sector. Besides these, Kerala holds almost a complete all-India monopoly in the production of rubber, which is another important industrial raw material. Secondly, plantation crops derive their prominence from the fact that a large number of crops grown in Kerala find a good export market and are, therefore, very good foreign exchange earners.

1.29 One other feature of the Kerala economy which owes its origin to the agricultural sector may also be pointed out. Unlike the rest of India, where barter trade is still prevalent on a significant scale in the rural areas, Kerala economy is highly monetized. The large number of cash crops grown in the State are all brought to the market for sale. Secondly, since a high percentage of food requirements are obtained from the other parts of India, they are again channelled through the market. A high degree of commercialization of Kerala economy is one of the factors responsible for absorption of a large section of the population in the tertiary sector.

1.30 Otherwise agriculture in Kerala carries with it all the disquieting features common to Indian agriculture. The pressure of population on land is even severer here. The average size of holdings in Kerala has dwindled down to 1.5 acres

[1] Intensity of cropping is the ratio between gross cropped area and net sown area. It gives the degree to which a given piece of land is utilized.

11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

India coastline, 30 per cent of the country's fish production came from the coast of Kerala. There is, however, still ample scope for increasing the output of fish. Only the fringe of the potential for off-shore fishing has been tapped up till now. Similarly, it is believed that the output of fish can also be increased considerably from the coastal fisheries without subjecting the fishing grounds to undue pressure. Introduction of mechanized fishing and better fishing gear can add considerably to fish production. However, as it is, the fishermen are the most depressed class of persons in the economy, and unemployment is at its maximum among them.

1.42 Development of fisheries is of particular importance in case of Kerala in view of the large food deficit of the State. The requirements of rice for a balanced diet could be considerably reduced if it is adequately supplemented by tapioca and fish. Tapioca by itself is not an adequate substitute for rice requirements since it lacks in proteins. However, its food value can be considerably enhanced if it is combined with a sufficient quantity of fish.

Secondary Sector

1.43 The secondary sector covers mining and industry. Mining activity is comparatively limited in Kerala in view of the meagre occurrence of minerals. During 1955-56 mining contributed only 0.6 per cent of the State Income (all-India 1%). The chief mineral asset of Kerala is the beach sand. Ilmenite is the most important variety of the beach sands. Besides some fine quality china-clay, of which there are good reserves, other items of mineral wealth of Kerala are not of any particular importance.

1.44 The industries of Kerala, both the factory[1] and the non-factory type, are marked by a low level of productivity as shown by Table 4. The main reason for this is the backwardness of technology employed as would be true of other parts of India as well. While this may not apply to the modern industries run on a large scale basis, in some of which indeed the State has been a pioneer, the overall picture of industry presented as a whole is, nevertheless, one of poor technological level. Further, during 1955-56, the organized factory industries employed 17.5 per cent of the working force in the secondary sector (9.7 lakhs) as against 21.8 per cent in India. Moreover, in both the factory and the non-factory categories, the major share of employment opportunities is monopolized by a few industries which can by no means claim to be in the forefront of modern industries.

1.45 In the non-factory sector, out of a total working force of 7.8 lakh persons, almost 50 per cent of the workers are employed in the coir industry, the foremost industry of Kerala. As in most cottage industries, the maximum degree of mechanization in coir industry never goes beyond a spinning wheel. In Malabar, even that is missing, since spinning operations are mostly carried on with hand. Similarly in the factory sector, the three major industries, viz., cashewnut, textile and coir factories which account for 64 per cent of factory employment, are entirely unmechanized.

1 Factory type of units are defined as those falling within the coverage of Section 2 in (*i*) and (*ii*) of the Factories Act, 1948. These include all those factories employing more than 20 workers as well as those employing between 10 to 20 workers, if using power.

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its success to the persevering efforts of the State Agriculture Department. The department has made a successful drive for pulse cultivation with a view to (*i*) raise the production of pulses in which the State is grossly deficit, (*ii*) to increase crop intensity, and (*iii*) to enrich soils by including a legume in the rotation.

2.16 During the same period the area under oilseeds rose by about 131 per cent. The area under all the millets, except ragi which rose by about 9 per cent, has registered a decline ; jowar area has declined by 33 per cent, and small millets by 53 per cent. Perhaps the increase in the area under some of the higher value crops such as oilseeds and sugarcane was at the expense of inferior and low value millet crops. This is another indication of the growing preference for high value crops. (Table 10)[1]

2.17 Land productivity is generally high in Kerala and compares very favourably with that in the other States of India. Yield of rice, the principal crop, was 1,108 lbs. per acre in 1958-59, which is about 20 per cent higher than the all-India average. Only the States of Madras and Andhra have higher yields. During 1951–59 the rice yield has increased by about 25 per cent (Table 11)[2] as a result of increased application of fertilizers, improved seeds and better agricultural practices. Similarly ragi is another high yielding crop with a yield of 1,290 lbs. per acre (1958-59)—the highest in India.

2.18 On the whole the yield rates for most of the crops have improved between the years 1951–59. For cotton and ragi, as in the case of paddy, the increase has been quite significant. On the other hand, there was a decline in the yield rate of jowar, groundnut and sugarcane. (Table 11)[2]

2.19 The latest districtwise disposition of area and production show that Palghat has the largest concentration of important food crops grown in the State. In 1958-59 it accounted for 29.2 per cent of the area under rice and one-third of rice production in the State. Palghat also leads in the production of millets and pulses. The district of Kottayam leads in plantation crops as well as in some of the other cash crops, for example, it had 32 per cent of area under ginger, 29 per cent of area under turmeric and 16.9 per cent of area under sugarcane.

2.20 There is a considerable degree of regional specialization in some of the minor field crops. For example, Palghat accounts for over 90 per cent of the area for the production of cotton and groundnut in Kerala. Similarly sesamum is concentrated in Alleppey (61%), tur (56%) and smaller millets (69%) in Palghat, and chillies (51%) and tobacco (95%) in Cannanore. This specialization is due to favourable conditions for the cultivation of these crops in the areas where they are being grown.

Future Development

2.21 It is generally known that agriculture aids economic development in three different ways. By providing a surplus of food requirements, it sustains a growing urban population. Secondly, agriculture is an important source of industrial raw materials and, in under-developed regions, generally forms the base for a large number of industries. This is particularly so in Kerala where over 70 per cent of the factory workers are employed in agro-based industries. Lastly, higher agricultural yields

[1] [see p 276, category 11b - Analyst]
[2] [see p 277, category 11b - Analyst]

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134 units. Actual cost is borne by the beneficiaries because the State recovers it by easy
185 instalments. The average cost of soil conservation is Rs. 150 per acre. The total cost of conserving one million acres at an average rate of Rs. 150 per acre would be
[464] Rs. 1.5 crores per year assuming that the programme is evenly phased. Soil conservation work is also very labour intensive and the proposed programme would give continuous employment to about 17,500 persons over the next 10-year period.

Related Aspects

*433 2.79 For full effectiveness, the development programme for agriculture, as
647 suggested above, would need a larger extension organization than that which was set up in 1953. It is expected to cover the whole of the State by the middle of the Third Plan period. The extension work at present is not intensive enough. The number of extension workers is too few to be really effective; the staff capacity needs to be augmented. In this connection the Agriculture Personnel Committee has recommended that the work in charge of a village level worker should be reduced by half. The Committee has also made suggestions on other aspects such as training and education, etc., of extension workers. The State Government may examine these proposals with a view to implementation as early as possible.

Marketing

*433 2.80 The small cultivators generally experience great difficulty in disposing of
442 their produce at reasonable prices. In case of some commodities like ginger, pepper
438 and arecanut, the difference between the price received by producers and that paid by consumers is as high as 100 per cent. In addition, none of the commodities except lemon grass is properly graded and this leads to serious consequences from the point of view of export markets. Marketing, processing and grading facilities should
[656] be developed so that both the producers as well as the consumers are benefited. In this context, as recommended by the Directorate of Marketing and Inspection, all the 41 wholesale markets in the State should be regulated. At present only four are regulated.

Agricultural Credit

*433 2.81 The average level of earning of farmers being rather low, most of them
452 require credit facilities for making improvements in their land. According to a survey, conducted in 1960 by the Bureau of Economic Studies, 89 per cent of the farmers need credit of some type. It also reveals that 82 per cent of the farmers need short term credit while medium and long term credit are needed by 56 and 34 per cent of farmers respectively. On the basis of the findings of the survey, the annual agricultural credit needs for the whole State may be put at 32.8 crores, of which Rs. 18.67 crores would be in the nature of short term credit, Rs. 6.74 crores medium term credit and Rs. 6.5 crores long term credit. The garden crops would account for Rs. 21.6 crores and paddy Rs. 11.2 crores.

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per cent of over 200,000 acres planted from 1902 onwards belonged to non-selected and low yielding strains. The Board has also estimated that more than half the rubber area contains trees that have outlived their economic life. Therefore, about 164,000 acres need immediate replantation. The total area planted till 1958 was 45,194 acres and of this replanting accounted for only 7,060 acres. To tone up the yields as well as to keep the trees in a good condition, it is necessary to replant at least 20,000 acres annually. A programme of this magnitude would need an investment of Rs. 50 crores at the rate of Rs. 2,500 per acre.

2.112 In certain well managed estates in Kerala, the yields are reported to be as high as 1,600 lbs. per acre. A large number of estates yield between 700 to 1,000 lbs. This shows the potentialities of raising the yields if the gardens are properly managed. There are also instances of estates, which yielded only 150 lbs. per acre, which have yielded 500 to 600 lbs. per acre after reorganization and improvement of the estates.

2.113 India is the only country in the world which is a producer and at the same time an industrial consumer of natural rubber. The indigenous production of natural rubber in India at present meets about half the needs of the country, the other half being met by imports. The demand for rubber is increasing at a very fast rate and is estimated to be 55,000 tons by 1961, 82,000 tons by 1966 and 125,000 tons by 1971.[1] This means that by 1971 the demand for natural rubber would be about eight times the present level of production. It is, therefore, suggested that utmost possible effort should be put in to step up the production of natural rubber in Kerala.

2.114 Rubber production can be raised by increasing the yields as well as by extending the area under the crop. An increase in the yields is a short term measure which can be realized, say, by the end of the Third Plan, provided the necessary measures are quickly implemented. Adequate annual application of fertilizer mixtures (NPK) coupled with soil conservation measures, working the soil and regulated tapping are some of the important measures that may be adopted. These measures can be undertaken more effectively and economically if the holdings are of larger size. Efforts at intensive cultivation should, therefore, be co-ordinated with increase in the size of small holdings—especially the small ones with less than 15 acres. This could be best achieved through the formation of cooperatives. The Government and the Rubber Board should initiate future development on these lines.

2.115 In addition to replantation, as suggested above, a regular plantation programme is necessary for a sustained increase in output. Raising new plantations to the extent of 300,000 acres may be suggested as the target for the next two Plans. A higher target would be only too desirable. There may, however, be some difficulties in implementing the plantation programme owing to scarcity of land. The exact scope for extension of area under rubber is not known. Various sources put the likely extent of this area to be between 2.25 lakh and 7.5 lakh acres. It is, therefore, suggested that the Department of Agriculture and Forestry should conduct a joint survey to make an accurate estimate of the extent of such land in the State. However, it is necessary to emphasise that the proposed plantations should consist of

[1] NCAER estimates.

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2.122 The development of pepper has not been receiving adequate attention. The crop was practically neglected during the First Plan. However, the high price of pepper which prevailed during early fifties provided a good incentive for extension of the area under pepper. The main work during the Second Plan was directed towards establishment of nurseries, extending the area under the crop and replacement of unthrifty vines with better ones. A total of 2,000 acres have been replanted so far.

2.123 It is possible to increase the yield of pepper from the present level of above one lb. to 2 or 3 lbs. per standard through intensive cultivation, better manuring, better varieties, and plant protection measures, especially against *pollu* disease. Manuring of pepper has been a neglected field and with the application of fertilizer mixtures (3 cwts. of ammonium sulphate + 4.5 cwts. of super phosphate + 1 cwt. of muriate of potash per acre) the existing yields could be almost doubled within a year. Moreover, some extension of area under pepper vines can also take place in house compounds, as an inter-crop in small holdings and in tea and rubber plantations on land unsuited for the main crop.

2.124 Since pepper is primarily an export commodity, 75 per cent of the produce being annually sent out of India, its future scope is very much dependent on the foreign markets. After the last war, India emerged as a major exporter of pepper in the world. The USA was our largest importer, accounting for over 70 per cent of our exports. But, of late, other countries such as Indonesia, Sarawak and Malaya have begun to export larger quantities and as a consequence, the USA, now accounts for only about 20 per cent of our exports. The prices have also fallen from a peak of Rs. 4,158 per candy during 1951 to Rs. 677 in 1959.

2.125 The above evidence points to an increasing degree of competitiveness in the world markets for pepper, and India is fast losing ground to the new entrants. So far India has been able to maintain the volume of exports because of large off-take by USSR and other East European countries. However, demand from these countries cannot be expected to fully compensate for the likely fall in future exports to the USA and other Western countries. It may, therefore, be seen that for maintaining the existing level of exports, not to speak of increasing it, it is essential that Indian prices should be competitive.

2.126 Prospects for internal demand, on the other hand, seem quite bright. Between 1952 and 1958, internal demand rose by about 25 per cent from a level of 5,000 tons. In view of rising population and fast developing food processing industry, future internal demand is likely to maintain this trend.

2.127 Oleorisin, a pharmaceutical product, is extracted from pepper. A considerable amount of pepper in the western countries is used for extraction of this alkaloid. Oleorisin could be extracted in Kerala and an export trade developed out of this. This aspect needs further investigation.

Cardamom

2.128 Cardamom is the most expensive as well as the most delicious of all the spices. India produces about 70 per cent of the world output of cardamom. The

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433 total area under cardamom in the State during 1957-58 was 69,658 acres, i.e., 245 about 54 per cent of total acreage under the crop in India. It is grown in high ranges at altitudes varying from 2,000 to 5,000 feet under the shade of trees as an understorey. The crop requires more or less the same natural conditions for growth as pepper or tea.

2.129 Production of cardamom in the State during 1957-58 (1,242 tons of dry pods), however, was about 65 per cent of the total output of the country, which shows a higher per acre yield in Kerala than in the rest of India. Even within Kerala, [438] cultivation of cardamom is highly localized, Kottayam accounting for over 80 per cent of the area under cardamom in the State. The major cardamom growing areas in the State are: the *Cardamom Hills*, Nelliampathi, Wynad, and Vembanad.

2.130 There has been a noticeable increase in the rate of yield in Kerala during the last decade. It rose from 30 lbs. per acre in 1952 to 40 lbs. per acre in 1958. This increase has been largely due to better cultivation practices and manuring.

2.131 There was no plan for cardamom development prior to the Second Plan. During the Second Plan period research and development schemes for improvement of cardamom were initiated. It was proposed to evolve high yielding varieties and also to devise ways and means of controlling and eradicating pests and diseases which do harm to the crop. These are comparatively long term measures. To help further intensification of work on cardamom development, it is suggested that 10 additional nurseries should be established for raising and distribution of disease-free plants as well as for studying the local problems. Five to eight of these nurseries may be established in Kottayam and the rest in other cardamom growing areas. Cardamom yields could be raised by at least 100 per cent during the coming decade, provided the crop is adequately manured and reasonably protected against diseases and pests. There is a disease locally known as *Kattee* which does great damage to the crop. More vigorous steps should be taken to control and prevent this disease through intensification of efforts as well as through widening the scale of operations.

2.132 There is scope for extending the area under cardamom within the existing rubber and tea plantations, since some parts of unoccupied area in these plantations are suitable for cardamom. There are also some lands suitable for cultivation of cardamom under the jurisdiction of the Forest Department, mostly in the Silent Valley. It is suggested that the State should start cardamom plantations in such lands and, 20,000 acres may be put as the target for the area to be covered during the Third and Fourth Plans. At the rate of Rs. 200 per acre, the total investment for covering 20,000 acres with cardamom would be Rs. 40 lakhs.

Coffee

2.133 Kerala is the third largest coffee producing area in the country. With 41,123 acres and 3,000 tons of output per annum in 1957-58 it accounted for about 15 per cent of the area and 17 per cent of coffee production in the country. Coffee [132] thrives in the tropical belt lying between 25°S and 30°N of equator. It requires a rainfall of 60 to 90 inches per annum with a distinct rainy and dry season and an average temperature of 70°F. The conditions required for coffee growth are present

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to a considerable degree in Malabar and Nelliampathi (Travancore-Cochin) areas. The major concentration of area occurs in the Kozhikode district of Malabar. It had 89 per cent of the total coffee area in the State during 1957-58. Between 1955 and 1958, coffee production in Malabar rose (18%) while that in Travancore-Cochin declined (16%). Similarly, the area under coffee during the same period registered an increase in Malabar (28.3%) but declined in Travancore-Cochin region (15.0%).

2.134 The average yield per acre of coffee in Kerala is rather low. It has been lower than the all-India average and is far below the average yield in Mysore, the principal coffee growing State in India, (1955-56 Kerala, 285 lbs. per acre; all-India, 369 lbs. per acre; and Mysore 395 lbs. per acre). Moreover, while the yields elsewhere in India, especially in Mysore, have been rising, in Kerala they have fallen from 368 to 285 lbs. per acre during 1951–58. Within Kerala, the yields are the highest in Kozhikode district which is largely due to the better management of estates in this district.

2.135 One of the characteristics of coffee plantations in Kerala is the overwhelmingly large number of small estates. In 1958, there were 14,475 registered estates with a total area of 47,675 acres. Of these, 12,412 were of less than five acres in size. There were only 99 estates out of 14,475 with an area over 50 acres. (Table 14)[2]

2.136 There is a distinct relationship between the size of coffee estates and the output per acre. It is noticed that yields increase progressively as the size of the estates increases. The yield per acre of *Arabica* variety in estates in the size group of 5-10 acres was 0.68 cwts. per acre, while for the estates with 200 acres or more, it was 2.26 cwts. Moreover, the quality of coffee produced on small plantations is also inferior and fetches only 65 per cent of the price of coffee produced on big estates. It is difficult to ascertain the most economic size but it is believed that for effective and profitable functioning, the minimum size would be 50 acres. If this is accepted, then only less than one per cent of coffee estates in Kerala are economic. The question of making these plantations economic through consolidation or extension of area under coffee plantations should, therefore, receive serious attention. Two more points need attention. First, new areas should be planted with coffee *Arabica* rather than coffee *Robusta* since the former gives higher yields. Secondly, as in the case of tea, replantation is also over-due in the coffee plantations. Remedies on the same lines as suggested for tea hold good for coffee also.

2.137 Unlike tea, the major portion of which is exported, coffee plantations are substained largely by the demand for internal consumption. Internal demand, however, has not been keeping pace with rise in the output of coffee. At present India has quite a large surplus in coffee and efforts are being made to export the surplus. In spite of an enormous surplus of coffee in South America, efforts in India have yielded good results as shown by an increase in exports from 3,000 tons in 1952-53 to 15,228 tons in 1956-57.[1] Most of our exports go to East European countries. There is scope for stepping up the exports further, in spite of the world

[1] Source: Coffee Board, Bangalore.

2 [see p. 279, category 11b -- Analysis]

in the early years has been due to the fact that either the sanctions from the Government were received late or the staff was not appointed in time. The shortfall in performance during the Second Plan period emphasises the need for devoting greater attention to forest development programmes during the Third Plan period.

FUTURE DEVELOPMENT OF FORESTRY

4.29 Forests are an important source of raw material for industry in Kerala. Their importance is brought out by the fact that forest-based industries are more predominant in the economy of Kerala compared to the position they occupy in the industrial structure of India as a whole.[1]

4.30 In view of the important position occupied by the forest-based industries in Kerala, the policy towards forest resources should aim at long-run enhancement of the forest potential so that an increasing surplus of raw materials could be made available to industry. Forest development policy in the State should, therefore, be guided by the following objectives :

(*i*) Utilization of resources as yet untapped.
(*ii*) Raising the long-run forest potential through:
  (*a*) acceleration of the process of conversion of poor deciduous forests into valuable teak and softwood plantations.
  (*b*) extensive reclamation of grasslands on the basis of experimental Eucalyptus plantings carried out during the Second Plan.
(*iii*) Incorporation of technical improvements in the methods of logging, etc., so that wastage could be reduced. These aspects are discussed in the following paragraphs.

Existing Potential

4.31 In Kerala, the existing potential of forest resources is being exploited comparatively much better than in many other States of India. Due to easy accessibility provided by the numerous rivers and roads, many of which serve the forests, extraction has been very much facilitated. The importance of the role of river transport in exploitation of forest wealth is shown by the fact that two big centres of forest produce, viz., Kallai and Chalakudy are both located by the side of rivers. Although the general picture as regards exploitation of existing resources is quite bright, some pockets still remain untapped. These are discussed below :

4.32 (*i*) *Bamboo Resources* : In spite of a large bamboo potential in the State, this source remains completely unutilized for industrial purposes. Out of the total available supply, about two-thirds is utilized for local requirements of construction, etc. The position regarding the quantum of surplus available is as follows.

[1] See Chapter on Industries.

AVAILABILITY OF SURPLUS BAMBOO RESOURCES

Name of Division	Government Forests		Private Forests	
	Area in acres	Yield in tons of air-dry bamboos	Area in acres	Yield in tons of air-dry bamboos
Wynad	18,667	38,347	..	..
Kozhikode	20,045	61,479	14,755	32,391
Nilambur	18,863	46,336	20,988	24,015
Palaghat	3,090	8,654	2,890	5,586
Nemmara	6,800	18,054	25,460	81,361
Total	*67,487*	*173,878*	*64,100*	*143,353*

Source: Department of Forests, Kerala.

4.33 Out of the above surplus, it was recently agreed to supply 1,60,000 tons to M/s Gwalior Rayons for setting up a Rayon factory. They have also been promised an additional 1,00,000 tons when the factory is in full production. The latter amount could only be made available after the private forests have been acquired by the Government. *No extraction has so far been started owing to the flowering* that has taken place over a wide area in the forests.

4.34 On the basis of the above estimate of available and committed supplies, there still remains a balance of about 56,000 tons which could be utilized as raw material for paper manufacture. However, the paper mill project can be undertaken only after full regeneration in the flowered areas has taken place.[1]

4.35 During this interval it would be advisable to undertake surveys of other bamboo-bearing areas in the Travancore-Cochin area. At the same time efforts should be made to divert a part of bamboo at present being utilized for local requirements to industry. Far too high a proportion (about 66%) is being utilized for non-industrial uses.

4.36 (*ii*) *Eta Reed Resources* : The two reeds *Ochlandra travancorica* and *Ochlandra Rheedi* occur in forests of the State. These reeds are at present being supplied under a concession granted to Punalur Paper Mills Ltd. The reeds in these coupes flowered from 1953–57 and, consequently, the Punalur Mill is getting only about 5,000 tons of reeds from the allotted coupes against their annual requirements of 25,000 tons of green reeds. After full generation takes place in the flowered area, the available supply of eta reeds would be roughly 50,000 tons. The surplus of 25,000 tons may by utilized by the Punalur Paper Mills which is planning to double its present capacity during the Third Plan.

4.37 (*iii*) *Minor Forest Produce* : A large number of medicinal plants exist in the State. But the potential is hardly being utilized. Against a gross revenue of Rs. 3.1 crores from the forests, minor forest produce was responsible for only Rs. 5.2 lakhs, that is, 1.7 per cent. This is unlike the neighbouring States of Mysore and Madras where minor forest produce contributed a substantial part of the revenue. A phyto-chemical plant is being set up at Neriamangalam. It will require a large

[1] Further details of a paper factory are discussed in the Chapter on Industries.

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Second Plan, 9,220 acres had been covered by artificial plantations of these species. In view of the current shortage, it is proposed that another 45,000 acres be added to these plantations. 3,000 acres out of these may be kept apart for the matchwood species.

Sandalwood Plantations

4.43 During the Third Plan period, it is proposed to take up 1,000 acres of this plantation at Nachivayal, Marayr, and Maunanthura, in the Devicolom range. The general prospects for sandalwood in the State are not very bright but if some additional suitable areas could be located, they may be taken up for plantation during the Fourth Plan period.

Bamboo Plantations

4.44 The existing resources (para 4.32) are largely being consumed for local uses leaving only one-third of the overall supply as surplus for industrial utilization. In order to augment the existing supplies, it is proposed to raise Burma bamboo over an area of 1,000 acres during the Third Plan, by under-planting it in teak plantations in Nilambur area. During the Fourth Plan another 2,000 acres may be taken up.

PLANTATIONS OF FAST-GROWING SPECIES

4.45 So far, the trend of thinking has favoured an emphasis on the growth of plantations of hardwood species like teak and rosewood which find a ready demand but have got a long rotation period. Attention has only recently been focussed on the fast-growing species. In view of the growing pace of industrialization and the consequent steep rise in demand for forest materials, it would be desirable to supplement the long rotation species with fast-growing types which give the yields much more quickly. The three main species of this type which can be grown in Kerala are *Eucalyptus Grandis*, cashewnut and wattle.

4.46 The whole of the area under *shola* grass is suitable for conversion into *Eucalyptus Grandis* and wattle plantations. The productivity of these grasslands will be very much enhanced if these economic species are planted there. The success which has already attended the planting of eucalyptus promises a bright future for this species. These plantations can be extended over 25,000 acres during the next 10 years. The State Government proposes an allocation of Rs. 75 lakhs for the purpose of raising this plantation during the Third Plan period. The economic importance of eucalyptus plantations arises from the fact that they form the raw material for mechanical pulp and rayon industry.

4.47 The seeds for these plantations were first obtained from Australia. It is suggested that the advice of an Eucalyptologist may be sought through the Colombo Plan and the State officers may also be sent to Australia for training. This will help in perfecting the technique of raising these valuable plantations all over the grasslands in the State.

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the fishing industry, owns a boat-building yard, a workshop, a cold storage and refrigeration plant and runs a training centre. The fishing villages are thus being developed into what may be called Integrated Fishing Centres.

5.11 *Off-shore Fishing*: An attempt to introduce exploratory and commercial off-shore fishing operations from Cochin port was made by the Travancore-Cochin Government as early as in 1940. A Government sponsored private company operated three large-sized (65 feet to 90 feet) vessels for a time. But these operations proved abortive and were given up owing to lack of trained crew and absence of docking and repairing facilities. Thorough exploratory investigations have been on for the last few years, and at present deep-sea fishing is being carried on jointly by the Government of India and the Indo-Norwegian Project.

5.12 *Chank Fisheries*: With the transfer of some areas of Travancore-Cochin to Madras at the time of the reorganization of States, Kerala has lost some of its important chank fishing centres along the Kanyakumari coast, and only a few centres of lesser importance, Thekkay Kollencode, Poovar, Pulinkudi, Poonthura, Shankumugham and Veri are now left with the State. The right of collection of chanks is annually auctioned on royalty basis, preference being given to cooperatives. The number of chanks collected and the money realized by the cooperatives in 1957-58 and 1958-59 were 26,629 chanks (for Rs. 16,361) and 18,355 chanks (for Rs. 9,177.50) respectively.

Inland Fisheries

5.13 Estuaries, backwaters and adjacent low-lying fields, rivers and canals, ponds, tanks and reservoirs comprise the inland fisheries of Kerala. According to the State Fisheries Department, the total production from these sources is at present about 50,000 tons per annum. This represents only 20 per cent of the total fish production in the State. The inland fish production of Kerala, though much lower than that of West Bengal (12,000 tons), compares favourably with that of Madras (40,000 tons).

Estuaries and Backwater Fisheries

5.14 The more important rivers opening directly into the sea and having permanent link with it are the Periyar, Bharatpuzha, Beypore, Billiapatam and Korapuzha. Regular fishing in the estuaries is done only during the south-west monsoon period (end of May to beginning of August) when fishing activities in the sea, owing to rough weather, are almost at a standstill. The estuarine catches include such varieties as Mullets, Milk Fish, Prawns of different types and Horse Mackerel.

5.15 The backwaters of Kerala covering approximately an area of about 300 square miles, are the most important source of inland fish production. The main areas are Ashtamudy, the Kayamkulam and the Vembanad, all situated in the Southern part of the State. The production from estuaries and backwaters is estimated by the State Fisheries Department at about 46,000 tons per annum. Prawns constitute the bulk of the catch which comprises, in addition to Prawns, Mullets, Bekti, Horse Mackerel and Engraulis.

Transport

5.46 The entire coastline of Kerala is well served by the railways. From Trivandrum to Kayankulam and from Tirur to Manjeswar, a total distance of 220 miles, the tracks are only two to three miles from the sea coast. In addition, there is a motorable road running almost all along the entire coastline. Head loads, bicycles, motor lorries, all these modes are employed for the transportation of fish to the markets depending on the distance of the landing sites from the consuming centres.

5.47 The State Fisheries Department operates four insulated vans. In addition, the Department operates two insulated carrier boats, one from Cochin and the other from Azhikode. These boats transport iced-fish through the inland waters to the interior places. For the marketing of fish in the interior areas, the Indo-Norwegian Project operates eight refrigerated vans.

5.48 It is estimated that the State will require about 60 road vehicles and 20 carrier vessels during the next 10 years. The capital expenditure on these is expected to be about Rs. 40 lakhs, of which Rs. 15 lakhs would be required during the Third Plan. The trucks and carrier vessels should, as far as possible, be owned and operated by Fishermen's Cooperative Societies. Expansion of insulated wagon facilities on the railways will be equally necessary. Insulated wagons should be provided on routes connecting the major production centres with the consumption centres.

Marketing

5.49 The marketing of fish in Kerala is not well organized. At present it is controlled by a few moneylenders and fish merchants. The fishermen are very poor and have generally to depend on borrowings during the off season. A departmental survey reveals that in 1958 the fishermen in Kerala had total assets of only about Rs. 30 lakhs against a total debt of Rs. 135 lakhs. Only a small percentage of the fishermen in Kerala own the boats and nets they use. Most of them work as employees under few boat-owner fishermen. In the pay-off period the boat-owner advances small amounts to the fishermen for their day-to-day needs. The catch is auctioned at the landing centres. The bidders include the fish curers, the retailers and lorry owners, who generally supply fish to the retailers.

5.50 Fish prices fluctuate considerably even in the course of the day. Fish is never weighed in the market. They are measured by standards such as heap, basket, and number, and these vary from market to market. The important wholesale fish markets in the State are located at Trivandrum, Kottayam, Tonur, Trichur, Kozhikode, Alwaye, Changanacherry and Athirumpuzha.

5.51 Changanacherry, Athirumpuzha and Vaniyankulam are the most important markets for cured and salted fish. In the coastal areas the consumption of dried fish is confined mostly to the off-season when fishing totally stops. In the interior of the State, owing to lack of transport facilities, cured fish is sold for the major part of the year. The State has a number of retail fish markets, every town or a group of villages having at least one.

5.52 Fish marketing in Kerala requires a great deal of improvement, both

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MINERAL RESOURCES: SIZE OF DEPOSITS AND EXTRACTION COST

6.5 In the following pages the importance of the mineral resources, the size of the deposits, costs of extraction—and allied factors, as they affect the industrialization programmes for Kerala, are discussed at some length.

Ilmenite

6.6 Foremost among the mineral resources of the State are the beach sand deposits in Quilon district which contain large concentrations of heavy minerals like ilmenite, monazite, rutile, sillimanite and zircon. Some of the ilmenite is of inferior quality due to leucoxenization, particularly along the Neendakara—Azhiyikkal bar.

6.7 The heavy mineral occurrences are of three types:

(*i*) Back beach sand dunes, which form a wasting asset.
(*ii*) Beach washings, which are renewed seasonally during the monsoons.
(*iii*) Sand bar.

In general, the beach washings have a higher content of ilmenite and other heavy minerals than the dunes and the sand bar. The extent of the variations in this respect may be seen in the table below:

	Beach washing (*Per cent*)	*Dunes* (*Per cent*)	*Sand Bar* (*Per cent*)
Ilmenite	75/78	60/70	40
Other heavy minerals	15/20	10/25	—
Quartz	around 50	10/15	60

6.8 Of these, the dune deposits are rapidly being used up; and as for the washings, it is not possible to predict the quantities that are likely to be available from time to time. The main reliance for ilmenite has, therefore, to be placed on the sand bar, the total reserves from which are estimated at 34.08 million metric tons.[1] Another estimate places the reserves at 50 million tons. In addition, there are a few minor occurrences in the lake deposits, and in the interior of the country beyond 500 feet of the shoreline.

6.9 At present, however, nearly half the requirements of raw sand come from the washings and the other half from the dunes. The collection of raw sand is done through contractors who supply the sand to the mineral companies. The dune sand is worked manually with a wooden scraper and the pools are very often not backfilled. Beach washings are merely scraped off the beach wherever they accumulate. The cost of the raw sand from these sources works out to nearly Rs. 8 a ton.[2]

[1] *Peaceful Uses of Atomic Energy*, Proceedings of the Second International Conference, Geneva, 1958, p. 106.
[2] *Quartz sand at Pulliyaram*—pits mouth value Rs. 1.50 a ton.

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"Europeanism" further enhanced its influence in Malabar with the introduction of new industries and capitalistic enterprise. The coconut, cashew nut and coir industries employ thousands today and have created amongst the people an even greater dependence on the fluctuations of world prices than in the days of the pepper trade. Weaving, tile factories (such as the one founded by the Basel Mission), saw-mills, match factories and metal industries have given many people a new outlook on life which they could never have had in the old days, and has profoundly changed their traditional concepts. Prohibition introduced by the Congress Party Government, with its consequent forbidding of the ancient profession of toddy tapping, has thrown many Tiyas out of work, obliging them to seek their livelihood elsewhere, and modifying for this reason the traditional structure of their economy and family life.

Greater and better medical facilities, as well as a growth in industrial productivity, have brought about a correspondingly sharp rise in the population, so much so, indeed, that today Kerala ranks first in density to the square mile out of the whole of India. Agricultural prosperity has unfortunately not kept pace with this advance, making it often difficult for everyone to obtain food, especially when the monsoon fails, as it often does in the latter part of the year. Foodstuffs, especially grain, have thus to be imported from outside, and when this is not sufficient, many seek work in other parts of the world, leaving their families for years at a time, to emigrate and hire themselves out as labourers in Ceylon, Singapore, and the Malay Federation.

It is not surprising, under the circumstances, that the old order in Kerala has crumbled. Of the rajas and maharajas of old, none are any longer in positions of responsibility, those of Cochin and Travancore having also been made destitute by the recent re-arrangement of States in India. The Nambudri Brahmins are, perhaps, those who, because of their priestly character, continue more than anyone else, to lead the ancient, traditional life. Many of them, however, have gone in for the new enterprises, and if they do not always themselves own and direct them, they have invested funds in them. The younger members of the *illams* appear to be increasingly dissatisfied with their lot, and do not seem prepared to accept the old imperatives of occupation and succession. It may not, after all be just a coincidence that the Communist Party Government now in power in Kerala is headed by a Nambudri Brahmin.

The Nayar caste is no doubt the one that has been the hardest hit by the sweeping changes brought about by altered conditions. But its

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326 [465] father is usually the teacher of his children in the hereditary caste. A good workman can earn from about 8 annas to 10 annas per day.

438 *Village trade.*—Iron ware used for domestic utensils and for agricultural purposes is got from Trichur, the nearest town. There are however a few retail shops in the 'town.' All articles of consumption are bought from retail shops, the retail keepers themselves getting their wares from either Trichur or Palghat.

Rice is the principal commodity. Arecanut and to some extent pepper and bamboos form important items of sale. There is a fair half a mile to the north of the 'town' which meets once a week (every Wednesday), for the sale of arecanut and pepper. Merchants from various parts of Malabar and even from the east of the Ghats come here to buy arecanuts. Vegetables and sundries also are exposed for sale for the use of the villagers only.

361 491 The main metalled road which passes from Shoranur to Trichur passes through the middle of the 'town.' Another road from the west touches the main road to the north of the 'town.' The Shoranur-Cochin Railway touches this place. The commercial town of Trichur is only ten miles to the south.

474 Co-operation in trading as well as in most other affairs is conspicuous by its absence. A Registrar of Co-operative Societies has recently been appointed in the State, and, I am told, gave one or two lectures in the place, but nothing came of it. I have hopes that a co-operative credit society will be started within a few years. I may mention that such credit societies have been opened in three places in the taluk and are receiving much help from the State. The co-operative principle as yet is not extended to trading, but with the development of knowledge and culture this may come.

Economic condition—

465 Statement showing wages (in *money*) for the whole State.

Workers.	Minimum.	Maximum.	Maximum in villages.
	Rs. A.	Rs. A.	Rs. A.
Carpenters	0 6	1 0	0 8
Blacksmiths	0 6	0 12	0 8
Masons	0 6	0 14	0 8
Bricklayers	0 7	0 12	0 8
Sawyers	0 10	1 0	Piece-worker.
Coolies —			
Male	0 4	0 10	0 6
Female	0 3	0 6	0 3
Boys	0 2	0 4	0 2

To Cherumans payment is made in kind (see above). Also wages are paid in kind to agricultural workers in the village area especially during the harvest season.

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245 eight miles from the village, but the primitive oil mill is chiefly used, worked by two oxen. It is very cheap. Perhaps two rupees would be enough excepting for the oxen.

438 *The village trade.*—The chief articles consumed are rice, fish, vegetables, cereals and spices. The price of the total quantity consumed in the village may be estimated at Rs. 2,50,000, the total sales of the shop being Rs. 3,50,000, of which one lakh is to outsiders.

The quantity of produce taken to the market is not very great. The rice and cereals and spices necessary for consumption come from Palghat and consequently must be bought from the bazaar All other articles that are necessary, e.g., vegetables, fish, salt, chillies, oil, straw, fodder, fuel, etc., are brought to the house by petty traders or by the actual producers. In addition to this there is a weekly fair where local produce to the value of about Rs. 1,000 is sold weekly. A smaller quantity, which may be estimated at Rs. 36,000 per annum, is sold to shopkeepers and they sell to other villages. The people sell to shopkeepers only when they cannot sell in any other way, for the shopkeepers offer only a low price.

491 The main road comes from the Cochin State and passes through the northern and the western side of the village and bends and passes through the southern side. One branch road runs from the west and passes through the centre and ends at the eastern extremity of the village. The road system is not satisfactory. Other branch roads are wanted and those that are made have not been repaired at all for many years, though tolls are collected. People once complained of this to the Taluk Board but to no effect, although thousands of pilgrims visit this place every year on account of the sanctity of the temple. There are numerous by-ways.

498 The nearest railway stations are Pattambi, Trichur, and Watak-
505 kancheri, each twenty miles away. People go to Trichur by boat through the backwaters, and the steam boat that runs from Ponnāni to Tirur is availed of by many and it is cheap. There is backwater communication to Ponnāni and Cochin.

438 Copra, coir, etc., are taken or sent to Cochin and the people get in return rice, cloth, and cereals and other luxuries. Fish can be got from the sea, which is very near the village. The fishermen go every day in the morning and return in the evening.

465 *Economic condition of the village.*—Wages for artisans are always paid in money; for agricultural work both in kind and in money.

Money wages.—The ordinary labourers are always paid in money. In short all those kinds of labour which do not immediately bring fruit to the owner are paid in money. A labourer, for a full day's work, is now paid four annas; five or six years ago three annas. For short work such as carrying weights, etc., the wage is fixed for the moment and will vary according to the distance they have to go, etc. Generally two annas must be paid for one mile as an average. For carrying a bag of rice a high wage is demanded because of high weight.* Woman's labour costs three annas per day now, formerly 2½ annas, a boy's labour 2½ annas now, formerly 2 annas.

Carpenters get six annas a day, boy carpenters three annas, formerly four annas and two annas. Other artisans such as black-

[160 lb.—Ed.]

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west, and sold there. The profit of the bargain is four annas. Twelve families subsist on this trade. 252

Buttermilk, ghee and butter are made and sold by some families. But this is not a steady trade. It is dependent on cows giving birth. 234

Village trade.—The volume and the extent of village trade is limited; the wants are few and easily satisfied. Paddy seed for cultivation is not purchased but borrowed from the landlord at an interest of sixty per cent. The amount borrowed with the interest thereon is annually given back to the landlord and again borrowed at the sowing season. The borrower is bound to return paddy fit for seeding. 438 426

Other commodities useful for agriculture, such as ropes, vessels used for lifting water, etc., are purchased from the little town of Kunnankulam, eight miles off and belonging to the Native State of Cochin. There is a big bazaar at Kunnankulam where almost all necessaries and luxuries are sold. But the usual market for the village trade is that held on every Thursday at Chalisseri, a large village three miles to the west of Kothachira. People take areca, paddy and other vegetables to this market, get these sold there and with the money thus obtained purchase necessaries; sometimes articles are directly exchanged for paddy. The chief necessaries usually purchased are salt, fish, oil, kerosene, chillis, onions, and cloth to wear. Men and women wear simply one *mundu* around the waist. Hence little clothing is required. 438 443 [291]

Chalisseri is in a way an important place. Much trade in areca is carried on here. The agents of the areca traders of Chalisseri come to each family and purchase directly the quantities each has to sell. The quantity conveyed to market by the ryot himself is not very great. The selling price of areca varies from three to five rupees per tulam (= 25 lb.) according to time and circumstances. The arecanut traders of Chalisseri are absolute masters of this business and often impose their own terms upon the cultivator. After being cut and dried areca is exported by the former into the districts of the east. The best areca grower has sold nuts worth Rs. 400 a year. [435]

The road that runs from the Pattambai railway station to Chowghat passes through Chalisseri. This is the nearest road to Kothachira people. It winds near Kutnad and thus runs parallel to the northern and western boundaries of Kothachira at a distance of two miles from each. A by-road cut from the western arm of the main road to the house of one of the jenmis at his own expense, has long been out of use and is not adapted for public purposes. 491

The idea of co-operation is unknown. A public road opened along the private footpath that runs between Karuvathur, a village six miles to the east of Kothachira, and Chalisseri, would be of immense use to the public of these parts. Much traffic is carried on along this footpath between these places specially on market days. It would run across Peringode and along the boundary between Mathur and Kothachira and thus benefit all these desams. [476]

Economic condition of village.—The economic condition of this desam is rather discouraging. The people are deep in debt, are overworked and underfed and ground down by a double tyranny, the tyranny of the landlord who is also the money-lender, and the tyranny of deep-rooted custom in all their lives and walks. 511

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323 would be better paid. Some of these potters are employed by tile works producing pottery and glazed earthenware and are there paid Rs. 10 or so a month.

322 *Carpenters.*—There are five families of carpenters. There is steady demand for their labour, which is well paid. The occupation is hereditary and confined to the caste of 'Asaris', as they are called, a division of the Thiyyas. Full time is spent on the craft, which follows very old traditions. Earnings average about 6 annas a day. The carpenters go out to other villages for work.

326 *Goldsmiths, blacksmiths.*—Two or three families of each combine their traditionary crafts with agriculture, and are better off than most other low caste families. In the agricultural seasons they work morning and evening in the fields; and only at noon at their crafts. So they earn wages in money and in kind. The goldsmith earns Rs. 8 to Rs. 10 in this way per month; the blacksmith Rs 5 to Rs. 10.

325 *Moulders.*—There is one family making vessels of bell-metal for all sorts of uses—domestic utensils, temple bells, etc. They are very skilled workers and well paid, owing to the great demand for their productions. Some cups, bowls, etc., made by these are very beautiful and exquisitely designed and polished. Earnings Rs. 10 to Rs. 15 per month, according to state of business.

285 *Basket-makers.*—Baskets, mats, etc., are made out of the bamboo by the Parials. Very useful, but cheap. Only a local market and mostly made to order, as most business is in the village. Only spare time is spent in this occupation; it is miserably ill paid owing to weakness in bargaining. There is scope for development.

293 *Umbrella makers.*—Umbrella making is the hereditary occupation of the Panans. The umbrellas are made of palm leaves and bamboo, and much used in the village. Until recently imported umbrellas were not seen. The indigenous article costs only a few coppers and gives better protection against rain, but is unwieldy. The earnings of the Panans from this source are very low, and they are now taking to agricultural labour.

[262] *The Chettis* make what are called *Pappatams*—the thin cakes to be fried in oil, for which Malabar is famous. The Chettis are also cartmen and take goods and passengers to neighbouring

[276] places. The *Paravans* make slaked lime for chewing. About half the adults chew a mixture of betel, areca, and slaked lime.

438 *Village trade.*—The village buys every year agricultural implements such as ploughs, spades, levelling boards, harrows, *kuzhi kutti*. Most of these are made to order by the village craftsmen. Some are bought at neighbouring fairs. Seed is usually preserved by the cultivator out of his produce, but sometimes he is forced by poverty to consume it and then borrows it or buys it with borrowed money. Live stock is bought at the weekly fair of the neighbouring village of Vaniamkulam.

The villagers buy the articles of ordinary consumption like salt, sugar, kerosene oil, gingelly and coconut oil, as well as the various grains and pulses at the village shop. Sugar is a luxury to all but the richest villagers. More than Rs. 600 worth of toddy is sold in the village, the Cherumas, Pariahs and Panans being the chief consumers. They pay in paddy, out of their wages. Clothing is bought at neighbouring fairs or in the nearest trading centre.

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Sale of village produce.—Paddy, coconuts, bananas, plantains, arecanuts, pepper, vegetables, medicinal plants and roots are sent to market in larger or smaller quantities. 438

Paddy is not taken to the market, but traders come to the houses or the village shop to buy. Pepper is bought by Muhammadan traders early in the season, while not yet ripe, and afterwards sold at a great profit, often 100 or 200 per cent. All the other articles are taken by the producers to the market, chiefly to the Vaniamkulam weekly fair and sold at greater or smaller profit. A part of the produce is consumed in the village.

The trunk road from Palghat to Ponnani passes through the middle of the village. It leads to the two railway stations of Shoranur (the junction for the South Indian Railway and the Cochin Railway) and Pattambi, which are almost equidistant. The road also passes through Vaniamkulam, 6 miles east of the village, where there is the most important fair in Malabar. The town of Ottappālam (where there is a High School and a Munsif's Court) which is a small commercial centre, also lies on the road, some nine miles east of the village. Palghat is thirty miles east. Ponnāni, 22 miles distant, is a small coast town and a commercial centre and it is the western terminus of the road, which is also connected with Angadipuram, the taluk headquarters. The stream which passes through the village is full during the rains and is accessible to boats from the Ponnāni river. Some trade is thus carried on. Carts are the usual vehicles of transport. There are four in the village itself. 491 498

Village trade and consumption.—There is only one important shop in the village and it is therefore possible to get some idea of the amount of commodities bought by villagers from the accounts of the shop. The shop was started in 1892 and was at that time the only one in those parts. Since then a few petty shops have been started, but the business done by them is not very considerable. They deal mostly in those common articles of every-day consumption which are purchased in small quantities from day to day by the poorer classes. On the other hand the one important shop mentioned supplies the needs not only of the inhabitants of this village but of other villages as well. Some allowance must be made on this score when considering the consumption of commodities by this village, so that the total sales of the village shop may not be taken as representing the purchases of the inhabitants of this place. 443 438

The total sales of the shop amount in value to about Rs. 12,000 a year. The chief items are—

	Rs.
Paddy	2,500
Salt	2,000
Coconut-oil	1,500
Iron bolts, bars, screws and other metallic articles	1,000
Kerosene oil	750
Tobacco	750
Gingelly oil	500
Dhall, grains, pulses, etc.	1,500
Betel leaves and nuts	500
Castor oil	250
Sugar	200

31: Slater S-5 (1916-1917) 1918 AWI India
Kerala AWII

443 Of these paddy is mostly bought by outsiders and non-agricultural labourers, such as carpenters or blacksmiths. Most labourers
438 indeed get their wages in paddy. Metallic articles are mostly
[465] bought by blacksmiths, both in this village (to a very small extent) and by outsiders. So, too, in regard to coconut oil, gingelly oil, tobacco, sugar and all other articles, large quantities are purchased by persons coming from other villages, where there are no shops. Probably about 50 per cent of the total sales are to outsiders.

As regards the quantities of these articles consumed, the shopkeeper says that there is no difference between what is sold now and what was sold 25 years ago when the shop was started. Only the prices have risen. One or two new articles of consumption have however been introduced, e.g., coffee, the sale of which is increasing. Iron and other metallic articles began to be sold some 15 years ago and the sales are increasing, though very little is consumed in the village. Besides the articles mentioned the shop deals in sundry small articles of consumption in the village, such as medicinal products, garlic and onions (consumed by the
438 Cherumas and the lower castes), chillis, spices and the like. An important commercial product is pepper. The village produces about Rs. 2,000 worth of it and the shop buys about Rs. 1,000 worth from other villages. Very little of this is sold in the village. It is sent to the towns and commercial centres. The trade is very profitable and may be extended.

The commodities sold in the village are brought from the nearest towns or trading centres, like Palghat, Calicut, Trichur and Ponnāni. The usual means of transportation are bullock carts. It does not pay to bring small quantities by railway and there is also the risk of delay and damage. The villagers also sometimes buy their clothing and other articles in towns or at the Vaniamkulam fair. About a thousand rupees worth of vegetable and garden produce is also taken to the fair in a year for sale, with the proceeds of which the villagers buy cattle and implements or commodities for consumption. The local prices of commodities are 10 per cent higher than prices in towns, about 4 per cent representing cost of carriage and the remainder interest and profit. After deducting interest on capital invested at 9 per cent, the owner of the shop makes a fair sum as wages of superintendence and profits—about Rs. 400 per annum, excluding the profits from the pepper trade which are at least as much again as this. The shop also sells paper and other articles of stationery for the use of villagers at fair prices.

435 As regards the rise in retail prices in recent years, the village accounts show a general rise in prices of nearly 100 per cent—salt alone having fallen in price. The rise is most marked in foodstuffs and other articles of immediate consumption, and in metallic articles. Betel leaves have not risen much in price. Paddy, which used to sell at 2½ to 3 paras per rupee 25 years ago, now sells at 1·2 to 1·8 or 2 paras. Oils have generally risen at least 100 per cent in 25 years. So also sugar, tobacco and the like.

432 If one compares the total value of purchases by different classes, one will find that the many purchases of the few well-to-do persons and the few small purchases from day to day of the great majority